



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,314	02/17/2004	B. Raghava Reddy	HES 2002-IP-009337U1	9746

28857 7590 04/19/2006
CRAIG W. RODDY
HALLIBURTON ENERGY SERVICES
P.O. BOX 1431
DUNCAN, OK 73536-0440

EXAMINER

KUGEL, TIMOTHY J

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

CW

Office Action Summary	Application No.	Applicant(s)	
	10/780,314	REDDY ET AL.	
	Examiner	Art Unit	
	Timothy J. Kugel	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-36 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☒ Claim(s) 1-36 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>see attached</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-36 are pending as filed 17 February 2004. Claims 1-20 are withdrawn from further consideration.

Restriction

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, drawn to a method of servicing a well bore, classified in class 166, subclass 244.1.
 - II. Claims 21-36, drawn to a well bore servicing fluid, classified in class 507, subclass 203.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product can be used in processes not related to well bore servicing requiring a viscosity response to raised temperature such as suspension polymerization.
4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Election of Species

5. Should applicant elect to proceed with the invention of group I, claim 7 is generic to the following disclosed patentably distinct species: the non-ionic polymer. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Election

6. During a telephone conversation with Craig Roddy on 11 April 2006 a provisional election was made with traverse to prosecute the invention of Group II, claims 21-36. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

Art Unit: 1712

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

8. The information disclosure statements submitted on 17 February 2004 and 23 June 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

Specification

9. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Double Patenting

10. Applicant is advised that should claim 34 be found allowable, claim 36 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

Art Unit: 1712

one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 21-28 and 31-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,939,485 (Bromberg hereinafter). Please note that Bromberg is the US counterpart to WO 97/00275, which is an X-type reference cited on the international search report for PCT/GB2004/005336, which is a child of the instant application.

Bromberg teaches a composition for use in oil field applications such as removing drilling cuttings (Column 19 Lines 11-35) comprising up to 4 percent of a triblock (EO)(PO)(EO) polyol or a polyol/acrylic acid polymer composition (Column 4 Lines 5-16) that exhibits a reversible gelation or viscosification response to a change in temperature (Column 1 Lines 14-22 and Column 2 Lines 57-62) from non-covalent

Art Unit: 1712

interaction between polymer chains (Column 6 Lines 12-20), further comprising an inorganic salt (Column 9 Lines 8-17) or emulsion additives (Column 20 Lines 6-29).

14. Claims 29 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bromberg in view of US Patent 6,444,316 (Reddy hereinafter).

Bromberg teaches a composition for use in oil field applications such as removing drilling cuttings comprising up to 4 percent of a triblock (EO)(PO)(EO) polyol or a polyol/acrylic acid polymer composition that exhibits a reversible gelation or viscosification response to a change in temperature from non-covalent interaction between polymer chains, further comprising an inorganic salt or emulsion additives as detailed above.

Bromberg does not disclose expressly the composition further comprising an encapsulated salt.

Reddy discloses oil field treatment compositions comprising encapsulated salts such as calcium chloride, calcium acetate, calcium nitrate, ammonium chloride, ammonium persulfate, sodium chlorate and sodium perborate (Column 4 Lines 37-46).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the encapsulated salts of Reddy in the composition of Bromberg. The motivation to do so would have been to control the times when the chemicals are released in aqueous fluids (Reddy Column 1 Lines 13-21).

15. Claims 21-24 and 35 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 3,241,612 (Hiller hereinafter). Please note that Hiller is an X-type reference cited

on the international search report for PCT/GB2004/005336, which is a child of the instant application.

Hiller teaches a composition for servicing a borehole (Column 1 Lines 8-10) comprising 0.5 to 3.0 percent (Column 3 Lines 15-21) of methylcellulose, as exemplified by applicant, in water which has the property of forming a stiff gel as the temperature increases (Column 2 Lines 19-21) and further comprising salts—including iodides, nitrates, bromides and chlorides (Column 5 Line 70 – Column 6 Line 5).

16. Claims 28, 31-34 and 36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hiller.

Hiller teaches a composition for servicing a borehole comprising 0.5 to 3.0 percent methylcellulose—as exemplified by applicant—in water, which has the property of forming a stiff gel as the temperature increases, and further comprising salts—including iodides, nitrates, bromides and chlorides—as detailed above.

Since Hiller teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the effective viscosity, crosslinkability and ability to form a thermally reversible gel of the Hiller composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent

rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

17. Claims 29 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hiller in view of Reddy.

Hiller teaches a composition for servicing a borehole comprising 0.5 to 3.0 percent methylcellulose—as exemplified by applicant—in water, which has the property of forming a stiff gel as the temperature increases, and further comprising salts—including iodides, nitrates, bromides and chlorides—as detailed above.

Hiller does not disclose expressly the composition further comprising an encapsulated salt.

Reddy discloses oil field treatment compositions comprising encapsulated salts such as calcium chloride, calcium acetate, calcium nitrate, ammonium chloride, ammonium persulfate, sodium chlorate and sodium perborate (Column 4 Lines 37-46).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the encapsulated salts of Reddy in the composition of Hiller. The motivation to do so would have been to control the times when the chemicals are released in aqueous fluids (Reddy Column 1 Lines 13-21).

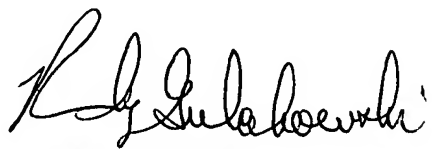
Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK
Art Unit 1712



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700